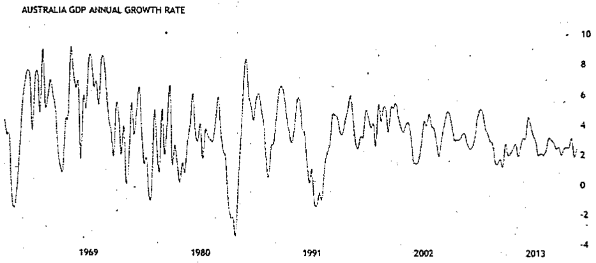
Photo by Cindy Tang on Unsplash

Australia's Economy is a House of Cards *by Matt Barrie and Craig Tindale*

I recently watched the federal treasurer, Scott Morrison, proudly proclaim that Australia was in "surprisingly good shape". Indeed, Australia has just snatched the world record from the Netherlands, achieving its 104th quarter of growth without a recession, making this achievement the longest streak for any OECD country since 1970.

Australian GDP growth has been trending down for over forty years.



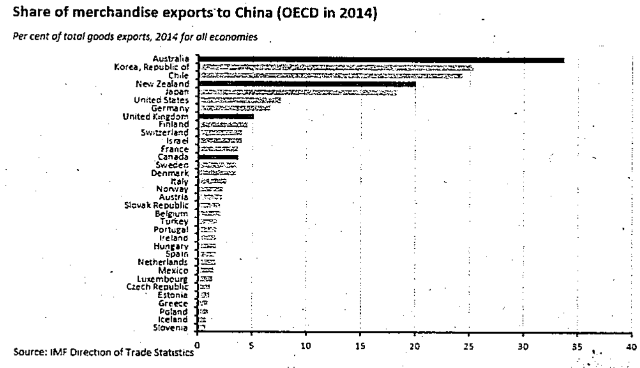
Source: Trading Economics, ABS

I was pretty shocked at the complacency, because after twenty six years of economic expansion, the country has very little to show for it.

For over a quarter of a century our economy mostly grew because of dumb luck. Luck because our country is relatively large and abundant in natural resources, resources that have been in huge demand from a close neighbour.

That neighbour is China.

Out of all OECD nations, Australia is the most dependent on China by a huge margin, according to the IMF. Over one third of all merchandise exports from this country go to China- where 'merchandise exports' includes all physical products, including the things we dig out of the ground.

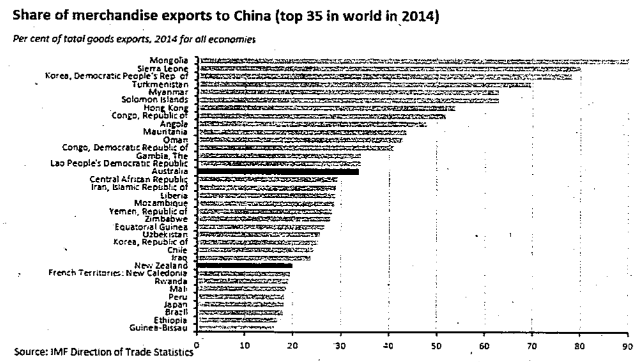


Source: Austrade, IMF Director of Trade Statistics

Outside of the OECD, Australia ranks just after the Democratic Republic of the Congo, Gambia and the Lao People's Democratic Republic and just before the Central African Republic, Iran and

Liberia. Does anything sound a bit funny about that?

Exports: Dependence on China by country (1)



Source: Austrade, IMF Director of Trade Statistics

As a whole, the Australian economy has grown through a property bubble inflating on top of a mining bubble, built on top of a commodities bubble, driven by a China bubble.

Unfortunately for Australia, that "lucky" free ride is just about to end.

Societe Generale's China economist Wei Yao said recently,

"Chinese banks are looking down the barrel of a staggering $1.7 trillion – worth of losses". Hyaman Capital's Kyle Bass calls China a "$34 trillion experiment" which is "exploding", where Chinese bank losses "could exceed 400% of the U.S. banking losses incurred during the subprime crisis".

A hard landing for China is a catastrophic landing for Australia, with horrific consequences to this country's delusions of economic grandeur.

Delusions which are all unfolding right now as this quadruple leveraged bubble unwinds. What makes this especially dangerous is that it is unwinding in what increasingly looks like a global recession - perhaps even depression, in an environment where the U.S. Federal Reserve (1.25%), Bank of Canada (1.0%) and Bank of England (0.25%) interest rates are pretty much zero, and the European Central Bank (0.0%), Bank of Japan (-0.10%), and Central Banks of Sweden (-0.50%) and Switzerland (-0.75%) are at zero or negative interest rates.

As a quick refresher of how we got here, after the Global Financial Crisis, and consequent recession hit in 2007 thanks to delinquencies on subprime mortgages, the U.S. Federal Reserve began cutting the short-term interest rate, known as the 'Federal Funds Rate' (or the rate at which depository institutions trade balances held at Federal Reserve Banks with each other overnight), from 5.25% to 0%, the lowest rate in history.

When that didn't work to curb rising unemployment and stop growth stagnating, central banks across the globe started printing money which they used to buy up financial securities in an effort to drive up prices. This process was called "quantitative easing" ("QE"), to confuse the average person in the street into thinking it wasn't anything more than conjuring trillions of dollars out of thin air and using that money to buy things in an effort to drive their prices up.

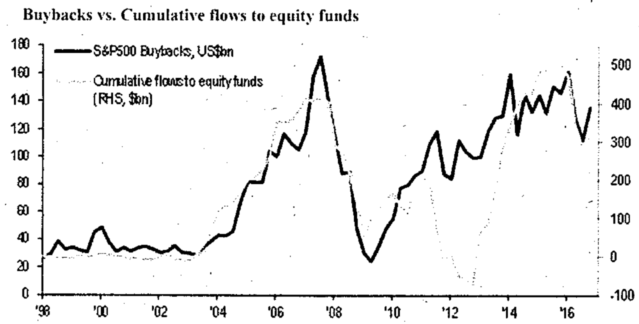
Systematic buying of treasuries and mortgage bonds by central banks caused the face value of those bonds to increase, and since bond yields fall as their prices rise, this buying had the effect of also driving long-term interest rates down to near zero.

Both short and long term rates were driven to near zero by interest rate policy and QE.

In theory making money cheap to borrow stimulates investment in the economy; it encourages households and companies to borrow, employ more people and spend more money. An alternative theory for QE is that it encourages buying hard assets by making people freak out that the value of the currency they are holding is being counterfeited into oblivion.

In reality, the ability to borrow cheap money was mainly used by companies to buy back their own shares, and combined with QE being used to buy stock index funds (otherwise known as exchange traded funds or "ETFs"), this propelled stock markets to hit record high after record high even though this wasn't justified by the underlying corporate performance.

Almost all flows into the equity market have been in the form of buybacks.

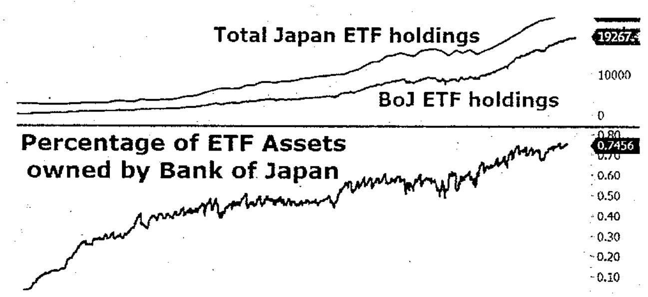


Almost all flows into the equity market have been in the form of buybacks. Source: BofA Merrill Lynch Global Investment Strategy, S&P Global, EPFR Global, Convexity Maven

In literally a "WTF Chart of the Day" on September 11, 2017, it was reported that the central bank of Japan now holds 75% of all ETFs. No, not 'owns units in three out of four ETFs'—the Bank of Japan now owns three quarters of all assets by market value in all Japanese exchange traded funds.

In today's world Hugo Chavez wouldn't need to nationalise assets, he could have just printed money and bought them on the open market.

The Bank of Japan now owns 75% of all Japanese ETFs.

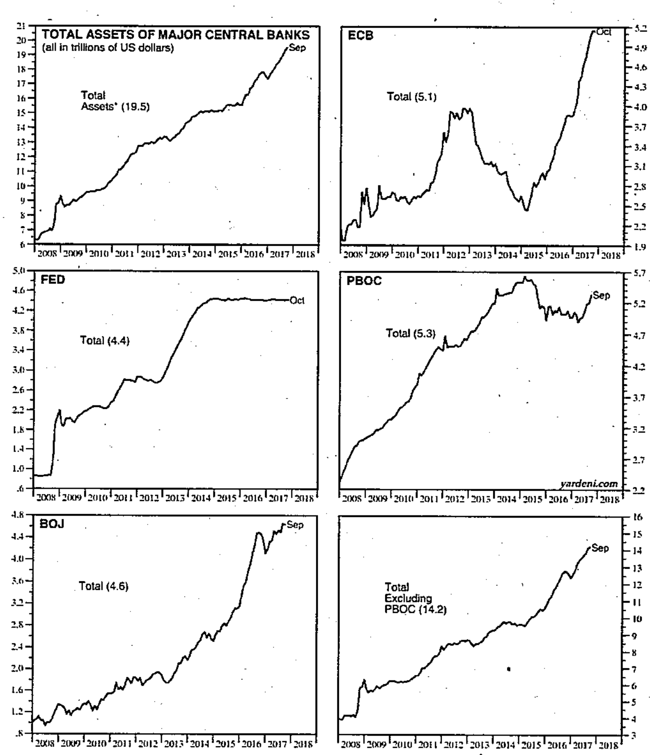


Source:Zerohedge

Europe and Asia were dragged into the crisis, as major European and Asian banks were found holding billions in toxic debt linked to U.S. subprime mortgages (more than 1 million U.S. homeowners faced foreclosure). One by one, nations began entering recession and repeated attempts to slash interest rates by central banks, along with bailouts of the banks and various stimulus packages could not stymie the unfolding crisis. After several failed attempts at instituting austerity measures across a number of European nations with mounting public debt, the European Central Bank began its own QE program that continues today and should remain in place well into 2018.

In China, QE was used to buy government bond which were used to finance infrastructure projects such as overpriced apartment blocks, the construction of which has underpinned China's "miracle" economy. Since nobody in China could actually afford these apartments, QE was lent to local government agencies to buy these empty flats. Of course this then led to a tsunami of Chinese hot money fleeing the country and blowing real estate bubbles from Vancouver to Auckland as it sought more affordable property in cities whose air, food and water didn't kill you.

QE was only intended as a temporary emergency measure, but now a decade into printing and the central banks of the United States, Europe, Japan and China have now collectively purchased over US$19 trillion of assets. Despite the lowest interest rates in 5,000 years, the global economic growth in response to this money printing has continued to be anaemic. Instead, this stimulus has served to blow asset bubbles everywhere.



Total assets held by major central banks.
Source: Haver Analytics, Yardeni Research

This money printing has lasted so long that the US economic cycle is imminently due for another downturn - the average length of each economic cycle in the U.S. is roughly 6 years. By the time the next crisis hits, there will be very few levers left for central banks to pull without getting into some really funny business.

It wasn't until September 2017 that the U.S. Federal Reserve finally announced an end to the current program, with a plan to begin selling-off and reducing its own US$4.5 trillion portfolio beginning in October 2017.

How these central banks plan to sell these US$19 trillion in assets someday without completely blowing up the world economy is anyone's guess. That's about the same in value as trying to sell every single share in every single company listed on the stock markets of Australia, London, Shanghai, New Zealand, Hong Kong, Germany, Japan and Singapore. I would think a primary school student would be able to tell you that this is all going to end up going horribly wrong.

To put into perspective how perverted things are right now, in September 2017, Austria issued a 100 year euro denominated bond which yields a pathetic 2.1% per annum. That's for one hundred years. The buyers of these bonds, who, on the balance of probability, were most likely in high school or university during the global financial crisis, think that earning a miniscule 2.1% per annum every year over 100 years is a better investment than well anything else that they could invest in - stocks, real estate, you name it, for one hundred years. They are also betting that inflation won't be higher than 2.1% on average for one hundred years, because otherwise they would lose money. This is even though in 20 years time they'll be holding a bond with 80 years left to go to be paid out in a currency that may no longer exist. The only way the value of these bonds will go up is if the world continues to fall apart, causing the European Central Bank to cut its interest rate further and keep it lower for 100 years. Since the ECB refinancing rate is currently zero percent, that would mean that if you wanted to borrow money from the European Central Bank, it would literally have to pay you for the pleasure of borrowing money from it. The other important thing to remember is that on maturity, everyone that bought that bond in September will be dead.

So if one naively were looking at markets, particularly the commodity and resource driven markets that traditionally drive the Australian economy, you might well have been tricked into thinking that the world was back in good times again as many have rallied over the last year or so.

The initial rally in commodities at the beginning of 2016 was caused by a bet that more economic stimulus and industrial reform in China would lead to a spike in demand for commodities used in construction.

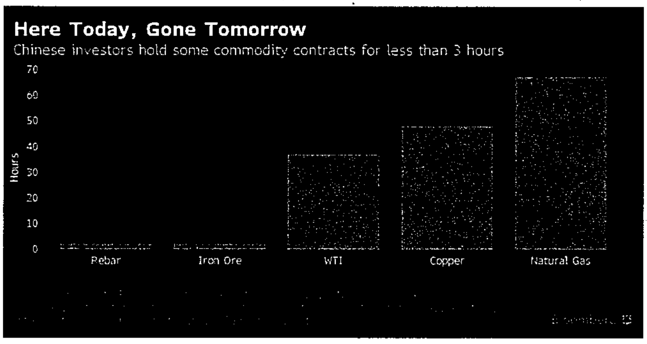
That bet rapidly turned into full blown mania as Chinese investors, starved of opportunity and restricted by government clamp downs in equities, piled into commodities markets.

> *This saw, in April of 2016, enough cotton trading in a single day to make a pair of jeans for everyone on the planet, and enough soybeans for 56 billion servings of tofu*

according to Bloomberg in a report entitled *"The World's Most Extreme Speculative Mania Unravels in China"*.

Market turnover on the three Chinese exchanges jumped from a daily average of about $78 billion in February to a peak of $261 billion on April 22, 2016—exceeding the GDP of Ireland. By comparison, Nasdaq's daily turnover peaked in early 2000 at $150 billion.

While volume exploded, open interest didn't. New contracts were not being created, volume instead was churning as the hot potato passed between speculators, most commonly in the night session, as consumers traded after work. So much so that sometimes analysts wondered whether the price of iron ore is set by the market tensions between iron ore miners and steel producers, or by Chinese taxi drivers trading on apps.



Average futures contract holding times for various commodities.

In April 2016, the average holding period for steel rebar and iron ore contracts was less than 3 hours. The Chief Executive of the London Metal Exchange, said

> *"Why should steel rebar be one of the world's most actively-traded futures contracts? I don't think most people who trade it know what it is".*

Steel, of course, is made from iron ore, Australia's biggest export, and frequently the country's main driver of a trade surplus and GDP growth.

Australia is the largest exporter of iron ore in the world, with a 29% global share in 2015–16 and 786Mt exported. At $48 billion, we're responsible for over half of all global iron ore exports by value. Around 81% of our iron ore exports go to China.

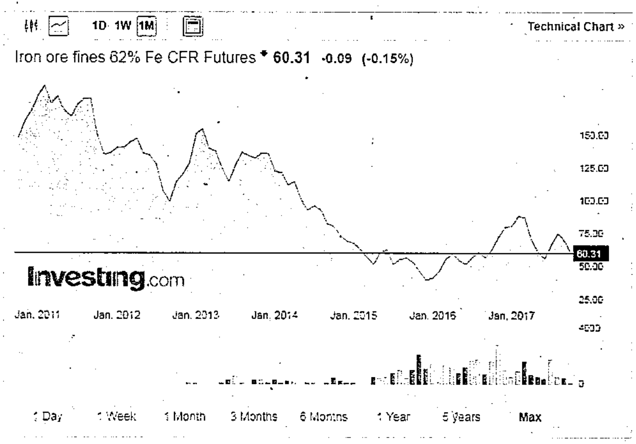
Unfortunately, in 2017, China isn't as desperate anymore for iron ore, where close to 50% of Chinese steel demand comes from property development, which is under stress as house prices temper and credit tightens.

In May 2017, stockpiles at Chinese ports were at an all time high, with enough to build 13,000 Eiffel Towers.

Last January, China pledged "supply-side reforms" for its steel and coal sectors to reduce excessive production capacity. In 2016, capacity was cut by 6 percent for steel and 8 percent for coal.

In the first half of 2017 alone, a further 120 million tonnes of low-grade steel capacity was ordered to close because of pollution. This represents 11 percent of the country's steel capacity and 15 percent of annual output. While this will more heavily impact Chinese-mined ore than generally higher-grade Australian ore, Chinese demand for iron ore is nevertheless waning.

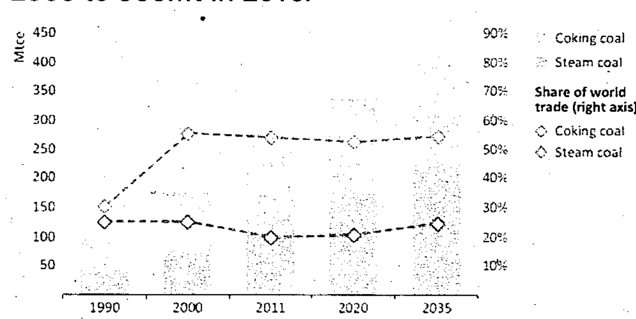
Over the last six years, the price of iron ore has fallen 60%.



Iron ore fines 62% Fe CFR Futures. Source: Investing.com

While the price of iron ore briefly rallied after the U.S. election in anticipation of increasingly less likely Trumponomics, DBS Bank expects that global demand for steel will remain stagnant for at least the next 10–15 years. The bank forecasts that prices are likely to be rangebound based on estimates that Chinese steel demand and production have peaked and are declining, that there are no economies to buffer this slowdown in China, and that major steel consuming industries are also facing overcapacity issues or are expected to see lower growth.

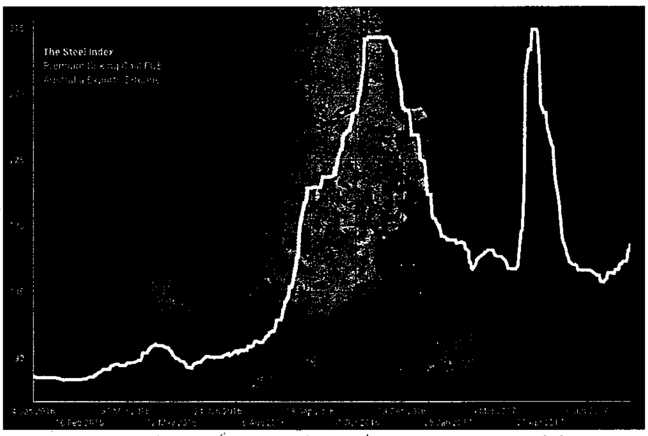
Australia's second biggest export is coal, being the largest exporter in the world supplying about 38% of the world's demand. Production has been on a tear, with exports increasing from 261Mt in 2008 to 388Mt in 2016.



Australian Coal Exports by Type 1990–2035 (IEA Core Scenario). Source: International Energy Agency, Minerals Council of Australia

While exports increased by 49% over that time period, the value of those exports has collapsed 38%, from $54.7 billion to $34 billion.

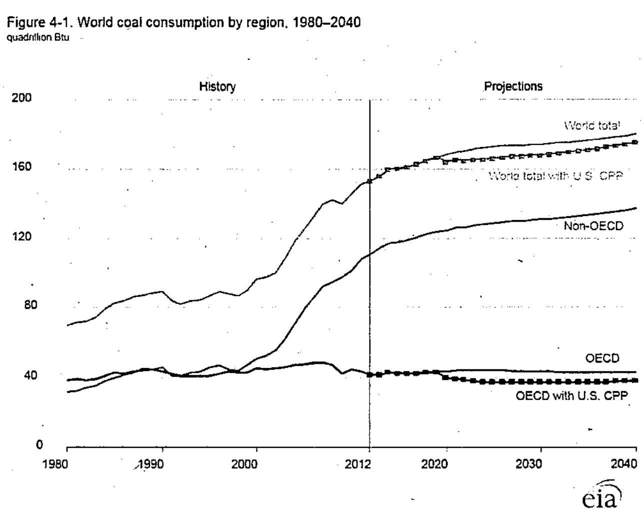
The only bright side for Australian coal in 2017 was that, unexpectedly, Cyclone Debbie wiped out several railroads and forced the closure of ports and mining operations, which has caused a temporary spike in coal prices.



Australian Premium Coking Coal FOB $/tonne. Source: Mining.com

There are two main types of coal - thermal coal, which is burnt as fuel, and coking coal, which is used in the manufacture of steel. The prospects for coking coal are obviously tied to the prospects of the steel market, which are not particularly good.

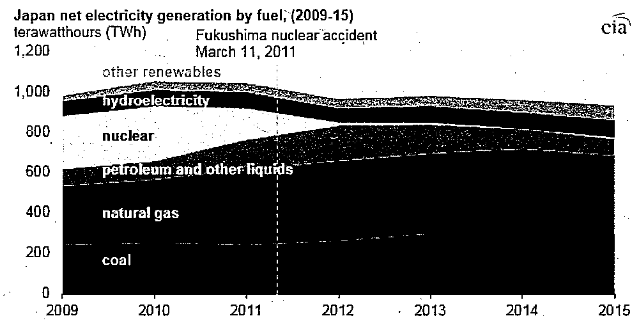
Thermal coal, on the other hand, is substantially on the nose, and while usage is still climbing in non-OECD nations, it is already in terminal decline in OECD nations. Recently, in April 2017, the United Kingdom experienced its first day without burning coal for electricity since the industrial revolution in the 1800s.



World Coal Consumption by Region 1980–2040 (forecast). Source: US Energy Information Administration

Australia's main export markets for coal are Japan and China, two markets in which the use of coal is forecast to decline through 2040.

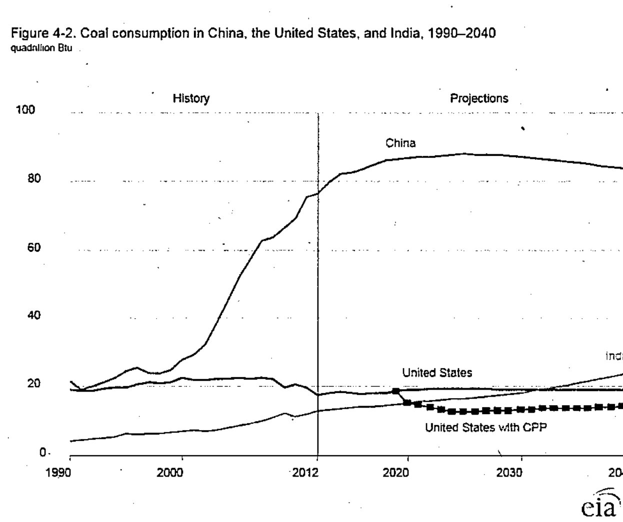
Australia's top export market for coal is Japan, and the unfortunate news is that the ramp up in coal exports here is a short lived adaptation after power companies idled their nuclear reactors in the wake of the Fukushima disaster. Between a zombie economy and fertility levels far below the replacement rate, Japan's population is shrinking and thus naturally net electricity generation has also been declining in Japan since 2010.



Japan net electricity generation by fuel 2009–15. Source: US Energy Information Administration

Coal consumption in China has dropped three years in a row, and in January 2017, 100 coal fired power plants were cancelled. China has announced that it is spending a whopping $360 billion on renewables through 2020, and this year is implementing the world's biggest cap-and-trade carbon market to curb emissions.

Blind to the reality of this situation, Australia is ramping up coal production while China commits to ending coal imports in the very near future in what can only be described as a last-ditch "dig it up now, or never" situation.



Coal Consumption in China, the US and India 1990–2040. Source: US Energy Information Administration

Coal exports rely on substantial investment by investors who build significant infrastructure, like ports and rail, the cost of which is shared among users according to volume. If a coal company defaults then the remaining coal companies pay extra to collectively cover the loss. A single failure can significantly increase the cost to the other users and can in turn cause pressure on the remaining partners. As this happens, their bonds get downgraded causing balance sheet erosion that ultimately can impact project viability.

Moodys recently downgraded the ratings of several Australian coal ports - including Adani's Abbot Point - after U.S. coal miner Peabody Energy, which ships through these ports, defaulted on several of its bonds.

Despite all of this, some in government can't get their head around why the Big Four banks and major investment banks including, Citigroup, JPMorgan, Goldman Sachs, Deutsche Bank, Royal Bank of Scotland, HSBC and Barclays are not keen to fund the gargantuan Carmichael coal project in Queensland's Galilee Basin.

The (now former) deputy Prime Minister of Australia, Barnaby Joyce, a New Zealand-Australian politician who served unconstitutionally as the Deputy Prime Minister of Australia, wants Australian taxpayers to be the lenders of last resort to Adani, an Indian miner, for $900 million to build a rail line from their proposed Carmichael Thermal Coal Mine to the port at Abbot Point, where it would be shipped to India. Adani is looking for a handout because, unsurprisingly, the banks knocked them back because the project was too risky and the public backlash against the project has been overwhelming. If it does go ahead, it is likely to be a rail line to nowhere, because by the time it opens, there is a chance that the project will be unviable.

Unless the government steps in, it's increasingly more likely that the project will go the way of the Wiggins Island coal export terminal, the fraught development originally conceived by Glencore and seven other project partners in 2008, at the literal top of the market for coal. Since conception, three of the project's original proponents—Caledon Coal, Bandanna Energy and Cockatoo Coal—have gone into administration. Only one of the project's three stages has been completed, at twice the estimated cost. The five remaining take-or-pay owners have been left with more than US$4 billion in debt to repay and hope is fading on any chance of refinancing before it all falls due.

What makes the Adani project so absurd is that India has recently cancelled more than 500 gigawatts of planned coal projects and the Indian government has said, however realistic that may be, that it intends to phase out thermal coal imports- precisely the type of coal Carmichael produces- entirely by 2020.

It's even more perplexing when you consider that 2016 was the year that solar became cheaper than coal, with some countries generating electricity from sunshine for less than 3 cents per kilowatt-hour (which is half the average global cost of coal power) and by October 2017, wind power is now cheaper than coal in India.

Furthermore, global policy to limit the rise in temperatures by 2% could result in a 40% drop in the trade of thermal coal, which would cut Australia's exports of such by 35%, according to a study by Wood Mackenzie. In 2014, thermal coal was 51% of our coal exports by volume, and this is precisely the type of coal that will be mined by Adani at Carmichael.

Given that Baarnaby's service was ruled invalid, one can only hope that his actions regarding Government funding for the Adani project might also be invalidated and we can put this flawed project to bed.

Recent events have given manifest life to Mark Carney's landmark 2015 speech in which Carney, the Governor of the Bank of England, warned that if the world is to limit global warming to below 2 degrees, then the estimates for how much carbon the world can burn makes between 66% and 80% of global oil, gas and coal reserves unusable.

In an essay last year, David Fickling wrote

> *"More than half the assets in the global coal industry are now held by companies that are either in bankruptcy proceedings or don't earn enough money to pay their interest bills, according to data compiled by Bloomberg. In the U.S., only three of 12 large coal miners traded*

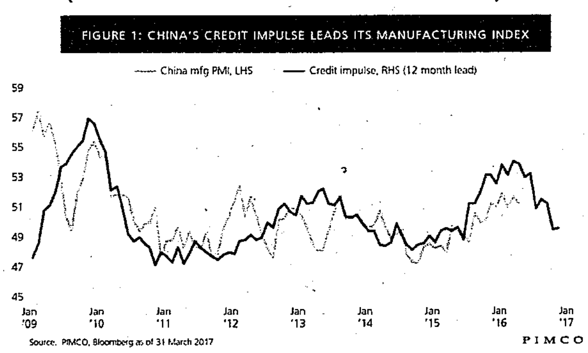
on public markets escape that ignominious club, separate data show".

Losing coal as an export will blow a $34 billion dollar per annum hole in the current account, and there's been no foresight by successive governments to find or encourage modern industries to supplant it.

What is more shocking is that despite the gargantuan amount of money that China has been pumping into the system since 2014, Australia's entire mining industry- which is completely dependent on China- has struggled to make any money at all.

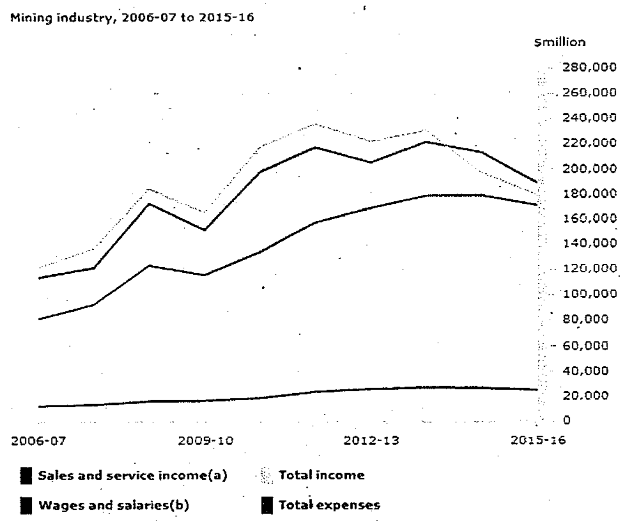
Across the entire industry revenue has dropped significantly while costs have continued to rise.

China credit impulse leads its manufacturing index (which in turn fuels commodities).



According to the Australian Bureau of Statistics, in 2015–16 the entire Australian mining industry which includes coal, oil & gas, iron ore, the mining of metallic & non-metallic minerals and exploration and support services made a grand total of $179 billion in revenue with $171 billion of costs, generating an operating profit before tax of $7 billion which representing a wafer thin 3.9% margin on an operating basis. In the year before it made a 8.4% margin.

Yes, the entire Australian mining industry.



Collectively, the entire Australian mining industry (ex-services) would be loss making in 2016–17 if revenue continued to drop and costs stayed the same. Source: Australian Bureau of Statistics

Our "economic miracle" of 104 quarters of GDP growth without a recession today doesn't come from digging rocks out of the ground, shipping the by-products of dead fossils and selling stuff we grow any more.

David Llewellyn-Smith recently wrote that this is unsurprising as "the Australian economy is now structurally uncompetitive as capital inflows persistently keep its currency too high, usually chasing land prices that ensure input costs are amazingly inflated as well."

With an economy that is 68% services, as I believe John Hewson put it, the entire country is basically sitting around serving each other cups of coffee or, as the Chief Scientist of Australia would prefer, smashed avocado.

Wider tradables sectors have been hit hard as well and Australian exports are now a lousy 20% of GDP despite the largest mining boom in history.

Successive Australian governments have achieved economic growth by blowing a property bubble on a scale like no other.

Read the remaining 60% of the article:
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